Abstract

The present invention provides a method and apparatus for interframe wavelet video coding which comprises Motion Compensated Temporal Filtering and Discrete Wavelet Transform Coding to obtain: 1. compressed quantification error and scalability on temporal analysis and spatial analysis, and 2. scalability on Motion Information (MI) data so that the performance of wavelet video coding on low bitrate can be improved. A method for partitioned coding on MI is proposed: 1. to partitioned coding a motion vector according to the spatial block, the temporal frame, or the numeric precision; 2. to partition motion vectors to a plurality of layers, and, when the video bitstream changes, only the required MI is put into the final bitstream. Accordingly, the performance of wavelet video compression on low bitrate is greatly improved while the compression rate on high bitrate is only a little lower.